

0280

#2

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/006,780

DATE: 12/14/2001
TIME: 11:08:09

Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12142001\I006780.raw

ENTERED

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4 <110> APPLICANT: Sakowicz, Roman
5      Beraud, Christophe
6      Guo, Jun
7      Freedman, Richard
9 <120> TITLE OF INVENTION: NOVEL MOTOR PROTEIN OF P. FALCIPARUM AND
10     METHODS FOR ITS USE
13 <130> FILE REFERENCE: CYTOP083
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/006,780
C--> 15 <141> CURRENT FILING DATE: 2001-11-30
15 <160> NUMBER OF SEQ ID NOS: 10
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 3931
21 <212> TYPE: DNA
22 <213> ORGANISM: Plasmodium falciparum
24 <400> SEQUENCE: 1
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26 tggtagggaa gagaccactg agcgaattag aaaagaagaa aaaagatagt gatataatta 120
27 cagaaaaaaaa caattgtacg ctttatatacg atgaaccaag atataaaagtg gatatgacaa 180
28 aatatataaga aaggcatgaa ttattatgtat ataaaagttt tgatgatacg gttgataatt 240
29 tcacagtata tgagaatacc ataaaaaccat taataataga ttatatgat aatggttgtg 300
30 tatgttcttg ttttgcctt gggcaaacag gtagccccaa gacttatacg atgttaggtt 360
31 cacaaccgtt tggacagagt gataccctgt gtatatttca atacgcagca ggggatataat 420
32 ttacctttt aaatattttt gataaaagata atacgaaagg gatatttata tcattttatg 480
33 aaatttattt tggtaaattt tatgatttt tacaaaaacg taagatggta gcagcattag 540
34 aaaatggaa aaaagaagtt gtagtaaaag attttaaaat attaagatgat ttaacaaaag 600
35 aagaatttaat attaaaaatg atagatggtg ttttatttaag aaaaatttgtt gtttattcac 660
36 aaaacgatgtt atcatctaga tcacatgcta tattaaatat tgatttaaaa gatataaata 720
37 aaaatacato tcttggaaaa attgccttca ttgatttagc aggaagtgaa agaggagctg 780
38 ataccgtttc acaaaaataaa caaacacaaaa ccgatggagc taatattat agatctttac 840
39 tagccttaaa ggaatgtatt cgagctatgg attcagataa aaatcatata cctttcagag 900
40 attcagaatt aactaaagtt ttaagagata tattttagg gaaatctaaa agtattatgt 960
41 tagctaataat ttctccttaca attagttgtt gtgagcaaac attgaataca ttaagatatt 1020
42 cttcaagagt taagaacttt aaaaataaat ctacatgtat aaatgaagaa gatgatacaa 1080
43 ataccgaaag aattgtata tttagattca agggaaatgtt aatgtatgca tctgtatag 1140
44 aaaatgtatg tatcaaatac aatcatcttc ttccaaataa taataataat aaaatcaatc 1200
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47 aaataaaagaa aaataagaaa aagggtttaa ttaattataa aagtacatta tataatgaca 1380
48 acaccataaa taaaaagcac aacaataata ataataataa taatgataat aatgataata 1440
49 ataatgataa taataataat aataataatg atagtagtag tatgttcaat aacatgatca 1500
50 atcatatgtt caataataat attaacaaca atatcaatgt aaataacaac aataataata 1560
51 ataataataa caataatgtt cataataatc atctaccaca acccaactat gcatttaccg 1620
52 atacatccga tttttcttgc ctgacgata tgaactgtca tttaaacaat aacgacaaaa 1680
53 gtatTTTCT acacaaaaaa aatTTAAGAG acaacattaa attaaaaac agaagttagtt 1740
54 gtgataacat tatgaacaag aagaaaaaca atcttcattt agcttagacat agtgtcgaa 1800
55 gtaaatttaac aatgtttca tatgacccac aaaaaataaa ggataataca ttttttaaaa 1860

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56 gtaatataaa caaatggaa gataatacac ctaaggatat actatatgag tcttaggaatg 1920
 57 tatcgaatat gaatggtaat gtttattag gtttaaaca gaataactcat cacgatatct, 1980
 58 cgacaaagga tgaaaatcat aatgataata aaataaaca tgggttatt aacattataa 2040
 59 ataatagtaa tgtgaatagt ataaataata gtaatatgaa tagtataaat aatagaata 2100
 60 tgaatagcaa tagtattat aaaagtaact ataatagtaa tcagtccata tcagatgttc 2160
 61 aaattagata cgtgaacgaa atggacacta gcaataaaaa taatgacaac atatttttg 2220
 62 atgctatatc atgtgataat aacatgtatc ctaatataac aaataataat aataataata 2280
 63 ataataataa taataataat aataacaata ttgatgtgga gaattataat aatcgatgtg 2340
 64 gtacaaataa ctctatgaag ttgtatgctt ataatagtca taacttattt caacctgata 2400
 65 ataataaaaa tacatcaaac attcagaata taaatacaaa taaaataat caagatggga 2460
 66 atgtaaatta ttcaatgaat tttgccatt ataattaaa tgataaaaaat tatttgatag 2520
 67 atttaaataa taaggaacaa aaggataaaa acatacatgg atgtgacaat aatattattc 2580
 68 aaaataggaa cgattttgaa aaaaagaaaa aaaccaattt ttacaataat aataatattg 2640
 69 ttatagtaaa taataatatg gggaaataaca atagtccccg tatgaaatat ggttatgtg 2700
 70 gtagtcatac aagtattgt aatatgaaaa ataatgaaat gaaaataat gaaatgaaag 2760
 71 ataatgaaat gaaagataat catataaaaa gtaacaataa taatagtagt agtagtagt 2820
 72 gtagtaataa taatattat aataatatta atgatgatga tacatttcaa aatgattatt 2880
 73 gtcacaatga taataccctt actattagac gaaaaaacaa tactaatata aatgataaca 2940
 74 tataccaaaa tgatgatata atttatacaa taaatagttt aaatgattat atgagaataa 3000
 75 ccctgttaca ttttaaagag aaatatacat atccaaacact aagcacaat gaagatataat 3060
 76 ataataaaga aatggaagga aaacatataa ggctggatga tcaagataaa tatgatgata 3120
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 80 ttagctactt tcaaaaaaaaaat gtagatacaa taataaataa ttgcttaat tcttagata 3360
 81 ttcttagtat gtatgatgt aaaaaagaga tactaaataa ttccttata tctaaatata 3420
 82 aagctgaaaa agataatgtt ataaaaaaaat atattaatga agatataaaa aatatgtt 3480
 83 tagaagaaat cgataaaaaca gctcagtcca tttatgaaaa gagaaaaagta ttacttacaa 3540
 84 aattattatt attattaaa aaaaatgttag atacacaaat aaataatgaa acaagtgatt 3600
 85 taagaaaaga tcttgttatg tgtcacatata gtaataataa tctgtatgtt caatttcatt 3660
 86 tttatgcata tagtagacta gaaaaagata ttattaattt aattatgtt agacaaatata 3720
 87 ggtgtgagag tgaaaactta agactctt atcaatttctt agtagtagaa tatcaaataa 3780
 88 aatcagcaaa ttctgtttt ttaatgtct cttcaaataa tggtgacatt atattactt 3840
 89 ataaaaaatt gggtcaagat aacatcaaaa attctatgga ccacaacaat atacacaaaaa 3900
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 93 <211> LENGTH: 1288
 94 <212> TYPE: PRT
 95 <213> ORGANISM: Plasmodium falciparum
 97 <400> SEQUENCE: 2
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 100 Leu Glu Lys Lys Lys Lys Asp Ser Asp Ile Ile Thr Val Lys Asn Asn
 101 20 25 30
 102 Cys Thr Leu Tyr Ile Asp Glu Pro Arg Tyr Lys Val Asp Met Thr Lys
 103 35 40 45
 104 Tyr Ile Glu Arg His Glu Phe Ile Val Asp Lys Val Phe Asp Asp Thr
 105 50 55 60
 106 Val Asp Asn Phe Thr Val Tyr Glu Asn Thr Ile Lys Pro Leu Ile Ile

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110	Thr	Gly	Ser	Gly	Lys	Thr	Thr	Tyr	Thr	Met	Leu	Gly	Ser	Gln	Pro	Tyr	Gly
111						100			105						110		
112	Gln	Ser	Asp	Thr	Pro	Gly	Ile	Phe	Gln	Tyr	Ala	Ala	Gly	Asp	Ile	Phe	
113							115		120					125			
114	Thr	Phe	Leu	Asn	Ile	Tyr	Asp	Lys	Asp	Asn	Thr	Lys	Gly	Ile	Phe	Ile	
115							130		135					140			
116	Ser	Phe	Tyr	Glu	Ile	Tyr	Cys	Gly	Lys	Leu	Tyr	Asp	Leu	Leu	Gln	Lys	
117							145		150				155			160	
118	Arg	Lys	Met	Val	Ala	Ala	Leu	Glu	Asn	Gly	Lys	Lys	Glu	Val	Val	Val	
119							165			170					175		
120	Lys	Asp	Leu	Lys	Ile	Leu	Arg	Val	Leu	Thr	Lys	Glu	Glu	Leu	Ile	Leu	
121							180			185					190		
122	Lys	Met	Ile	Asp	Gly	Val	Leu	Leu	Arg	Lys	Ile	Gly	Val	Asn	Ser	Gln	
123							195		200					205			
124	Asn	Asp	Glu	Ser	Ser	Arg	Ser	His	Ala	Ile	Leu	Asn	Ile	Asp	Leu	Lys	
125							210		215					220			
126	Asp	Ile	Asn	Lys	Asn	Thr	Ser	Leu	Gly	Lys	Ile	Ala	Phe	Ile	Asp	Leu	
127							225		230				235			240	
128	Ala	Gly	Ser	Glu	Arg	Gly	Ala	Asp	Thr	Val	Ser	Gln	Asn	Lys	Gln	Thr	
129							245			250				255			
130	Gln	Thr	Asp	Gly	Ala	Asn	Ile	Asn	Arg	Ser	Leu	Leu	Ala	Leu	Lys	Glu	
131							260			265				270			
132	Cys	Ile	Arg	Ala	Met	Asp	Ser	Asp	Lys	Asn	His	Ile	Pro	Phe	Arg	Asp	
133							275		280					285			
134	Ser	Glu	Leu	Thr	Lys	Val	Leu	Arg	Asp	Ile	Phe	Val	Gly	Lys	Ser	Lys	
135							290		295				300				
136	Ser	Ile	Met	Ile	Ala	Asn	Ile	Ser	Pro	Thr	Ile	Ser	Cys	Cys	Glu	Gln	
137							305		310				315			320	
138	Thr	Leu	Asn	Thr	Leu	Arg	Tyr	Ser	Ser	Arg	Val	Lys	Asn	Phe	Lys	Asn	
139							325			330				335			
140	Lys	Ser	Thr	Cys	Ile	Asn	Glu	Glu	Asp	Asp	Thr	Asn	Thr	Glu	Arg	Ile	
141							340		345					350			
142	Ser	Ile	Leu	Asp	Ser	Lys	Gly	Ser	Glu	Met	Asn	Ala	Ser	Ser	Ile	Glu	
143							355		360				365				
144	Asn	Val	Val	Ile	Lys	Ser	Asn	His	Leu	Leu	Ser	Asn	Asn	Asn	Asn	Asn	
145							370		375				380				
146	Lys	Ile	Asn	Arg	Gly	Lys	Ile	Asn	Asp	Lys	Ile	Glu	Arg	Asn	Asn	Ile	
147							385		390				395			400	
148	Leu	Lys	Asn	Lys	Ser	Phe	Asp	Lys	Pro	Arg	Glu	Gly	Phe	Thr	Ser	Thr	
149							405			410				415			
150	Phe	Gly	Lys	Tyr	Ser	Ser	Leu	Asn	Asp	Ile	Asp	Lys	Ile	Lys	Lys	Asn	
151							420			425				430			
152	Lys	Lys	Lys	Gly	Leu	Ile	Asn	Tyr	Lys	Ser	Thr	Leu	Tyr	Asn	Asp	Asn	
153							435		440				445				
154	Thr	Ile	Asn	Lys	Lys	His	Asn	Asp	Asn	Asn							
155							450		455				460				

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160	Asn	Asn	Ile	Asn	Val	Asn										
161						500				505						510
162	Asn	Ser	His	Asn	Asn	His	Leu	Pro	Gln	Pro	Asn	Tyr	Ala	Phe	Thr	Asp
163						515			520							525
164	Thr	Ser	Asp	Phe	Ser	Ser	Leu	Asp	Asp	Met	Asn	Cys	His	Leu	Asn	Asn
165						530			535			540				
166	Asn	Asp	Lys	Ser	Ile	Phe	Leu	His	Lys	Lys	Asn	Leu	Arg	Asp	Asn	Ile
167	545					550				555						560
168	Lys	Leu	Lys	Asn	Arg	Ser	Ser	Cys	Asp	Asn	Ile	Met	Asn	Lys	Lys	Lys
169						565				570						575
170	Asn	Asn	Leu	His	Leu	Ala	Arg	His	Ser	Val	Gly	Ser	Lys	Leu	Thr	Met
171						580			585							590
172	Phe	Ser	Tyr	Asp	Pro	Gln	Lys	Asn	Lys	Asp	Asn	Thr	Phe	Phe	Lys	Ser
173						595			600							605
174	Asn	Ile	Asn	Lys	Met	Glu	Asp	Asn	Thr	Pro	Lys	Asp	Ile	Leu	Tyr	Glu
175						610			615			620				
176	Ser	Arg	Asn	Val	Ser	Asn	Met	Asn	Gly	Asn	Val	Leu	Leu	Gly	Leu	Asn
177	625					630				635						640
178	Lys	Asn	Thr	His	His	Asp	Ile	Ser	Thr	Lys	Asp	Glu	Asn	His	Asn	Asp
179						645				650						655
180	Asn	Lys	Ile	Asn	Asn	Gly	Val	Ile	Asn	Ile	Ile	Asn	Asn	Ser	Asn	Val
181						660			665							670
182	Asn	Ser	Ile	Asn	Asn	Ser	Asn	Met	Asn	Ser	Ile	Asn	Asn	Ser	Asn	Met
183						675			680							685
184	Asn	Ser	Asn	Ser	Ile	Tyr	Lys	Ser	Asn	Tyr	Asn	Ser	Asn	Gln	Ser	Ile
185						690			695			700				
186	Ser	Asp	Val	Gln	Ile	Arg	Tyr	Val	Asn	Glu	Met	Asp	Thr	Ser	Asn	Lys
187	705					710				715						720
188	Asn	Asn	Asp	Asn	Ile	Phe	Phe	Asp	Ala	Ile	Ser	Cys	Asp	Asn	Asn	Met
189						725				730						735
190	Tyr	Pro	Asn	Ile	Thr	Asn										
191						740			745							750
192	Asn	Asn	Asn	Asn	Ile	Asp	Val	Glu	Asn	Tyr	Asn	Asn	Arg	Asp	Gly	
193						755			760							765
194	Thr	Asn	Asn	Ser	Met	Lys	Leu	Tyr	Ala	Tyr	Asn	Ser	His	Asn	Leu	Phe
195						770			775			780				
196	Gln	Pro	Asp	Asn	Asn	Lys	Asn	Thr	Ser	Asn	Ile	Gln	Asn	Ile	Asn	Thr
197	785					790				795						800
198	Asn	Lys	Asn	Asn	Gln	Asp	Gly	Asn	Val	Asn	Tyr	Ser	Met	Asn	Phe	Cys
199						805				810						815
200	His	Tyr	Asn	Leu	Asn	Asp	Lys	Asn	Tyr	Leu	Ile	Asp	Leu	Asn	Asn	Lys
201						820			825							830
202	Glu	Gln	Lys	Asp	Lys	Asn	Ile	His	Gly	Cys	Asp	Asn	Asn	Ile	Ile	Gln
203						835			840			845				
204	Asn	Arg	Asn	Asp	Phe	Glu	Lys	Lys	Lys	Lys	Thr	Asn	Phe	Tyr	Asn	Asn

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206	Asn Asn Ile Val Ile Val Asn Asn Asn Met Gly Asn Asn Asn Ser Pro		
207	865	870	875
208	Arg Met Lys Tyr Gly Leu Cys Gly Ser His Thr Ser Ile Asp Asn Met		880
209	885	890	895
210	Lys Asn Asn Glu Met Lys Asn Asn Glu Met Lys Asp Asn Glu Met Lys		
211	900	905	910
212	Asp Asn His Ile Lys Ser Asn Asn Asn Ser Ser Ser Ser Ser Ser		
213	915	920	925
214	Ser Asn Asn Asn Ile Tyr Asn Asn Ile Asn Asp Asp Asp Thr Phe Gln		
215	930	935	940
216	Asn Asp Tyr Cys His Asn Asp Asn Thr Phe Thr Ile Arg Arg Lys Asn		
217	945	950	955
218	Asn Thr Asn Ile Asn Ser Asn Ile Tyr Gln Asn Asp Asp Ile Ile Tyr		960
219	965	970	975
220	Thr Ile Asn Ser Leu Asn Asp Tyr Met Ser Asn Thr Leu Leu His Phe		
221	980	985	990
222	Lys Glu Lys Tyr Thr Tyr Pro Thr Leu Ser Thr Asn Glu Asp Ile Tyr		
223	995	1000	1005
224	Asn Lys Glu Met Glu Gly Lys His Ile Arg Leu Asp Asp Gln Asp Lys		
225	1010	1015	1020
226	Tyr Asp Asp Asn Asp Asn Asn Val Asp Asn Asn Lys Asn Asn		
227	1025	1030	1035
228	Val Asp Asn Asn Val Asp Asn Asn Val Asp Asn Asn Val Asp Asn		1040
229	1045	1050	1055
230	Asn Asp Lys Asn Asn Val Asp Asn Asn Asn Val Asp Asn Asp Asp		
231	1060	1065	1070
232	Asp Val Asp Phe His Asn Ile Lys Asn Phe Asn Asn Glu Tyr Leu		
233	1075	1080	1085
234	Ser Tyr Phe Gln Lys Asn Val Asp Thr Ile Ile Asn Asn Cys Leu Asn		
235	1090	1095	1100
236	Ser Leu Asp Ile Ser Ser Met Tyr Asp Asp Thr Lys Glu Ile Leu Asn		
237	1105	1110	1115
238	Asn Ile Leu Leu Ser Lys Tyr Lys Ala Glu Lys Asp Asn Val Ile Lys		1120
239	1125	1130	1135
240	Lys Tyr Ile Asn Glu Asp Ile Lys Asn Met Ser Leu Glu Glu Ile Asp		
241	1140	1145	1150
242	Lys Thr Ala Gln Ser Ile Tyr Glu Lys Arg Lys Val Leu Leu Thr Lys		
243	1155	1160	1165
244	Leu Leu Leu Phe Lys Lys Asn Val Asp Thr Gln Ile Asn Asn Glu		
245	1170	1175	1180
246	Thr Ser Asp Leu Arg Lys Asp Leu Val Met Cys His Ile Cys Asn Asn		
247	1185	1190	1195
248	Asn Pro Asp Asp Gln Phe His Phe Tyr Ala Tyr Ser Arg Leu Glu Lys		1200
249	1205	1210	1215
250	Asp Ile Ile Asn Leu Ile Met Leu Arg Gln Ile Trp Cys Glu Ser Glu		
251	1220	1225	1230
252	Asn Leu Arg Leu Leu Tyr Gln Phe Leu Val Val Glu Tyr Gln Asn Lys		
253	1235	1240	1245

VERIFICATION SUMMARY
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Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\12142001\I006780.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date